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William E. Bardwell

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EXAMINER

PERUNGAVOOR, SATHYANARAYA V

ART UNIT

PAPER NUMBER

2624

MAIL DATE

DELIVERY MODE

08/14/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/081,870

Applicant(s)

BARDWELL, WILLIAM E.

Examiner

Sath V. Perungavoor

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-11,13-17,19-23,25-30 and 32-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-11,13-17,19-23,25-30 and 32-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

[1] A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 31, 2007 has been entered.

### ***Response to Arguments/Amendments***

[2] Presented arguments have been fully considered, but are rendered moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

[3] Claims 1-4, 6, 6, 8-11, 13, 15-17, 19, 21-23, 25, 26, 29, 30, 32 and 33 rejected under 35 U.S.C. 103(a) as being unpatentable over Draganoff<sup>f</sup> in view of Abtahi<sup>ll</sup> et al. ("Abtahi").  
7, 14, 20, 28 and 35

Regarding claim 1, Draganoff discloses the following claim limitations:

A method for storing biometric information [fig. 8], the method comprising: capturing (*i.e.* 13) a biometric image and generating therefrom digital pixel data (*i.e.* 14) for an array of image pixels [col. 4, ll. 30-35]; selecting a plurality of non-contiguous sets (*i.e.* *odd numbered lines*) of image pixels from the array of image pixels (*i.e.* *96x96 image region*), each non-contiguous set (*i.e.* *odd numbered line*) of image pixels comprises a plurality of consecutive and colinear image pixels (*i.e.* *yardsticks*) [col. 4, ll. 30-35 and 40-45]; processing (*i.e.* *template creation*, 16) respective sets of digital pixel data (*i.e.* *yardsticks*) for the selected non-contiguous sets (*i.e.* *odd numbered lines*) of image pixels [col. 4, ll. 45-49]; and

Draganoff does not explicitly disclose the following claim limitations:

Storing the processed sets of digital pixel data for the selected non-contiguous sets of image pixels on the magnetic storage medium of the token.

However, in the same field of endeavor Abtahi discloses the deficient claim limitations, as follows:

Storing the biometric data (*i.e.* *fingerprint*) on the magnetic storage medium (*i.e.* *magnetic strip*) of the token (*i.e.* *card*) [col. 7, ll. 35-44].

It would have been obvious to one with ordinary skill in the art at the time of invention to modify the teachings of Draganoff with Abtahi to store the processed sets of digital pixel data on the magnetic strip of a card, the motivation being to perform cardholder verification [col. 4, ll. 65-67].

Regarding claim 2, Draganoff discloses the following claim limitations:

The method according to claim 1, wherein capturing the biometric image comprises using a biometric sensor (*i.e.* 8) having a sensing area (*i.e. inherently present*) [col. 4, ll. 28-30]; wherein selecting the plurality of non-contiguous sets of image pixels comprises selecting a reference set of image pixels (*i.e. a single odd numbered line*) based upon a predetermined location on the sensing area (*i.e. odd numbered line "1"*), and selecting at least one other set of image pixels (*i.e. odd numbered line "3"*) a predetermined distance (*i.e. one line gap*) from the predetermined location (*i.e. odd numbered line "1"*) [col. 4, ll. 41-45].

Regarding claim 3, Abtahi discloses the following claim limitations:

The method according to claim 2, wherein the location (*i.e. x and y position*) of the reference set of image pixels is also stored on the magnetic storage medium [col. 7, ll. 50-53].

Regarding claim 4, Draganoff discloses the following claim limitations:

The method according to claim 1, wherein capturing the biometric images comprises capturing multiple biometric images until a preferred biometric image is captured based upon an image quality threshold (*i.e. successful verification*) [col. 7, ll. 25-34].

Regarding claim 6, Draganoff discloses the following claim limitations:

The method according to claim 1, wherein the biometric information is based upon a fingerprint [col. 4, ll. 28-30]; and wherein capturing the biometric image comprises capturing the biometric image using a fingerprint sensor (*i.e.* 8) [col. 4, ll. 28-30].

Regarding claim 8, Abtahi discloses the following claim limitations:

The method according to claim 1, wherein the token comprises a generally rectangular substrate [fig. 7].

Regarding claim 9, Abtahi discloses the following claim limitations:

The method according to claim 1, wherein the token comprises at least one of an access card, credit card, debit card, frequent flyer card, driver's license card, identification card and smart card [col. 13, ll. 11-16].

Regarding claim 10, Draganoff discloses the following claim limitations:

A method of regulating with a processed (*i.e. template*) selected non-contiguous sets (*i.e. odd numbered lines*) of image pixels from an array of image pixels of an enrollment biometric image, each non-contiguous set (*i.e. odd numbered line*) of image pixels comprises a plurality of consecutive and colinear image pixels (*i.e. yardsticks*) [col. 4, ll. 30-35 and 40-45], the method comprising [fig. 9]: capturing a verification biometric image (*i.e. 19*) and generating digital pixel data (*i.e. 20*) for an array of image pixels from the verification biometric image [col. 7, ll. 39-42]; decoding (*i.e. 21*) the processed (*i.e. template*) selected non-contiguous sets of image pixels from the array of image pixels of the enrollment biometric image [col. 7, ll. 43-45]; and comparing (*i.e. 21*) the non-contiguous spaced apart sets of image pixels from the decoded biometric data (*i.e. template*) with the digital pixel data for the array of image pixels from the verification biometric image [col. 7, ll. 43-48].

Draganoff does not explicitly disclose the following claim limitations:

The processed selected non-contiguous sets of image pixels from the array of image pixels of the enrollment biometric image being stored on the magnetic storage medium of a token and determining if the token holder is the authorized token user.

However, in the same field of endeavor Abtahi discloses the deficient claim limitations, as follows:

Storing the biometric data (*i.e. fingerprint*) on the magnetic storage medium (*i.e. magnetic strip*) of the token (*i.e. card*) [col. 7, ll. 35-44] and determining if the token holder is the authorized token user [col. 8, ll. 59-67].

It would have been obvious to one with ordinary skill in the art at the time of invention to modify the teachings of Draganoff with Abtahi to store the processed sets of digital pixel data on the magnetic strip of a card, the motivation being to perform cardholder verification [col. 4, ll. 65-67].

Regarding claim 11, Draganoff (in context of claim 10) discloses the following claim limitations:

The method according to claim 10, wherein capturing the verification biometric image comprises using a biometric sensor (*i.e. 8*) having a sensing area (*i.e. inherently present*) [col. 4, ll. 28-30]; and wherein comparing the non-contiguous sets of image pixels comprises a bit by bit comparison of one of the non-contiguous sets of image pixels from the magnetic storage medium with the array of image pixels from the verification biometric image beginning at a first scanline and continuing to a last scanline until a match is found [col. 6, ll. 15-34].

Regarding claims 13, 15-17, 19, 21-23, 25, 29, 30 and 32 all claimed limitations are set forth and rejected as per discussion for claims 1, 2, 4, 6, 9 and 10.

Regarding claim 26, Abtahi meets the claim limitations, as follows:

The system according to claim 25, wherein the biometric sensor device further comprises a finger slide (*i.e.* 38) adjacent the fingerprint sensor [fig. 5].

Regarding claim 33, all claimed limitations are set forth and rejected as per discussion for claim 26.

[4] Claims 7, 14, 20, 28 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Draganoff in view of Abtahi further in view of Lu<sup>III</sup> et al. ("Lu").

Regarding claim 7, Draganoff and Abtahi meet the claim limitations as set forth in claim 1.

Draganoff and Abtahi do not explicitly disclose the following claim limitations:

The method according to claim 1, wherein the token comprises a card corresponding to the ISO/IEC 7810 standard and the magnetic storage medium comprises a magnetic stripe having three tracks in accordance with the ISO/IEC 7811 standard; and wherein storing the processed sets of digital pixel data for the selected non-contiguous sets of image pixels comprises storing the processed sets of digital pixel data for the selected non-contiguous sets of image pixels on the third track.



However, in the same field of endeavor Lu discloses the deficient claim limitations, as follows:

The method according to claim 1, wherein the token comprises a card (*i.e.* 30) corresponding to the ISO/IEC 7810 standard and the magnetic storage medium comprises a magnetic stripe (*i.e.* 31) having three tracks in accordance with the ISO/IEC 7811 standard [*col. 3, l. 60-col. 4, l. 3*]; and wherein storing the biometric data comprises storing the biometric data on the third track [*col. 8 ll. 56-60*].

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the teachings of Draganoff and Abtahi with Lu and store the processed sets of digital pixel data on the third track, the motivation being tracks 1 and 2 are being occupied to store name and PIN data [*col. 4, ll. 16-26*].

Regarding claims 14, 20, 28 and 35 all claimed limitations are set forth and rejected as per discussion for claim 7.

[5] Claims 27 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Draganoff in view of Abtahi further in view of Sibbald<sup>IV</sup> et al. ("Sibbald").

Regarding claim 27, Draganoff and Abtahi meet the claim limitations as set forth in claim 26 and further discloses the following claim limitations:

The system according to claim 26, wherein the finger slide further comprises finger guides (*i.e.* 38) [*Abtahi: fig. 5*].

Draganoff and Abtahi do not explicitly disclose the following claim limitations:

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The system according to claim 26, wherein the finger slide further comprises a finger stop.

However, in the same field of endeavor Sibbald discloses the deficient claim limitations, as follows:

A finger slide further comprising finger guides (*i.e.* 6,8, 14 and 16) and a finger stop (*i.e.* 10) [fig. 1].

It would have been obvious to one with ordinary skill in the art at the time of invention to modify the teachings of Draganoff and Abtahi with Sibbald to incorporate finger guides and stop, the motivation being to obtain proper alignment of the finger [col. 1, ll. 36-41].

Regarding claim 34, all claimed limitations are set forth and rejected as per discussion for claim 27.

### ***Contact Information***

[6] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Sath V. Perungavoor whose telephone number is (571) 272-7455. The examiner can normally be reached on Monday to Friday from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Matthew C. Bella whose telephone number is (571) 272-7778, can be reached on Monday to Friday from 9:00am to 5:00pm. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dated: August 6, 2007

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<sup>I</sup> US 6,075,876  
<sup>II</sup> US 5,509,083  
<sup>III</sup> US 5,432,864  
<sup>IV</sup> US 5,412,463